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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,472	01/16/2002	Cyrus E. Tabery	G0241	6131

7590 12/02/2004

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EXAMINER

DIMYAN, MAGID Y

ART UNIT PAPER NUMBER

2825

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,472

Applicant(s)

TABERY ET AL.

Examiner

Magid Y Dimyan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 14-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) 14-18 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>04/03/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement

1. Receipt is acknowledged of the Reply to Restriction Requirement/Preliminary Amendment filed 26 August 2004, in response to the Office Action mailed on 26 July 2004. Applicant's election of Group I in the reply filed on 26 August 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 14 – 18 and 23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group III there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 26 August 2004.
2. The Applicants have elected Group I (claims 1 – 7), and have added one new independent claim (claim 20) and three new dependent claims (claims 21 – 23). The Applicants have also canceled claims 8 – 13 (Group II) and claim 19 (Group IV). Furthermore, the Applicants stated in their Reply cited above that claims 14 – 18 have been amended pursuant to the rejoinder rules (MPEP § 821.04 and 37 C.F.R. §1.121) to include all the limitations of claims 1 – 7. However, the Examiner has determined that claims 14 – 18 have **not been**

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amended, and remain the original claims of Group III in the Restriction requirements cited in the Office Action. As of this date, the Office has not received an updated amendment from the Applicants. Thus, claims 14 – 18 (Group III) will **not be considered** for further prosecution on the merits by the Office, and are thus considered withdrawn from consideration. Since new claim 20 contains similar elements to claim 1, and new claims 21 and 22 are dependant upon claim 5, they will be considered as part of elected Group I. New claim 23 is dependent upon claim 17, and is thus part of Group III. Therefore, only claims 1 – 7, 14 - 18 and 20 – 23 remain pending in this application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 7 and 20 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,606,152 to Littau et al. (hereinafter, "Littau").

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3. Referring to claim 1, Littau discloses a system for feeding forward reticle fabrication data (see Abstract; col. 1, lines 19 – 45) comprising: (a) one or more fabricating components adapted to perform one or more reticle fabrication process (col. 7, lines 25 – 57); (b) a control system connected to the fabricating components adapted to control the operation of at least one or more fabricating components (col. 13, lines 53 – 59 and col. 14, lines 14 – 21); (c) one or more measurement component adapted to measure via scatterometry one or more reticle fabrication parameters from one or more reticle fabrication processes (Abstract; col. 5, lines 26 – 65); and (d) a signature data store connected to the control system adapted to store the scatterometry signatures (col. 13, line 53 to col. 14, line 26. A computer can store the signature in its memory). Thus, Littau recites all the claimed elements.

4. As to claims 2 and 3, see (4) above as well as col. 2, lines 18 – 67; col. 5, lines 26 – 59 which teach the elements of analyzing the reticle fabrication parameters and selectively feed forward control data as claimed.

5. As per claim 4, see (4) above, as well as col. 7, line 25 – col. 8, line 27 which recite the elements of the one or more fabricating components claimed herein.

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6. Referring to claim 5, see col. 13, line 53 to col. 14, line 26 which teach that the control system used for analyzing the fabrication parameters comprises a computer (i.e., a microprocessor and a memory).

7. As to claim 6, see (4) above, as well as Figs. 5A, 5B and 5C; col. 10, line 45 to col. 12, line 63 which show the scatterometry system adapted to generate the scatterometry signatures as claimed.

8. Referring to claim 7, see (4) – (8) above, as well as col. 1, lines 29 – 65; col. 7, lines 25 – 57; col. 10, lines 3 – 44 which teach the claimed fabrication parameter elements pertaining to the photoresist layer and reticle.

9. Claim 20 contains the same limitations as claim 1, and thus the same rejections apply.

10. As per claim 21, see col. 13, lines 53 – 59, which show a computer (i.e., microprocessor) connected to the measurement systems as claimed.

11. Referring to claim 22, see col. 2, lines 46 – 67 and col. 4, line 57 to col. 5, line 25 which teach the claimed elements of how the scatterometry signatures are constructed.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,912,741 to Carter et al. discloses an imaging scatterometer for providing measurements of the directional energy distribution of radiation reflected from the surface of a sample material as two-dimensional images.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Magid Y Dimyan whose telephone number is (571) 272-1889. The examiner can normally be reached on Monday - Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

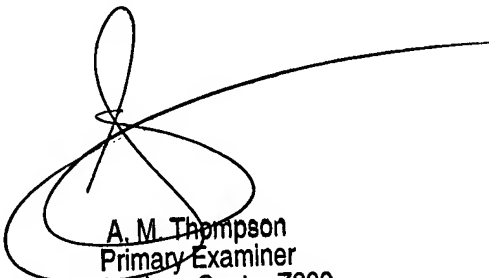
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Magid Y Dimyan
Examiner
Art Unit 2825

myd
29 November 2004

MYD



A. M. Thompson
Primary Examiner
Technology Center Z800